Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A process for forming a multilayer three-dimensional structure, comprising:

(a) forming and adhering a layer of material to a substrate, wherein the substrate may include one or more previously formed layers;

(b) repeating the forming and adhering operation of (a) a plurality of times to build up a three-dimensional structure from a plurality of adhered layers;

wherein the formation of each of at least a plurality of the adhered layers, comprises:

(1) obtaining a selective pattern of deposition of a first material having at least one void, comprising at least one of:

(a) selectively electrodepositing a first material onto the substrate, such that at least one void remains, comprising:

(i) bringing a mating surface of a contact mask and a mating surface of the substrate together in a non-parallel manner in the presence of an electrolyte, wherein so that an initial contact between the mating surface of the substrate and the mating surface of the contact mask occurs in a controlled manner at only selected locations, and wherein continued relative movement between the mask and the substrate bring substantially all relevant mating surfaces of the mask into contact with the substrate and so that mating leaves paths for excess electrolyte to escape from between the mask and the substrate;

(ii) electrodepositing the first material onto the substrate with the contact mask in place;

(iii) separating the contact mask and the substrate to expose the at least one void; or

(b) electrodepositing a first material onto the substrate and selectively etching the deposit of the first material to form at least one void therein, comprising:

(i) bringing a mating surface of a contact mask and a mating surface of the first material together in a non-parallel manner in the presence of an electrolyte, ~~wherein~~ so that initial contact between the mating surface of the first material and the mating surface of the contact mask occurs in a controlled manner at only selected locations, and where after continued relative movement of the mask and the substrate bring substantially all of the mating surface of the mask into contact with the first material and so that mating leaves paths for excess electrolyte to escape from between the mask and the first material;

(ii) etching into the first material with the contact mask in place to form at least one void; and

(iii) separating the contact mask and the first material.

Claim 2 (original): The process of claim 1 wherein a separation between mated and unmated portions of the mask substantially defines a straight line.

Claim 3 (currently amended): The process of claim 1 wherein a separation between mated and unmated portions of the mask, prior to bringing substantially all of the mating surface of the mask into contact with the first material, substantially defines a closed loop.

Claim 4 (original): The process of claim 3 wherein the closed loop is substantially a circle.

Claim 5 (currently amended): The process of claim 1 wherein, at initial contact, some portions of the mating surface of the mask and corresponding mating locations on the substrate are separated by a distance greater than that dictated by an alignment tolerance between the mask and the substrate.

Claim 6 (original): The process of claim 1 wherein the mask, prior to mating with the substrate is forced to have a curvature that is greater than a tolerance in setting curvature.

Claim 7 (original): The process of claim 6 wherein the force comprises excess gas or liquid pressure on one side of the mask.

Claim 8 (original): The process of claim 1 wherein, at initial contact, the mating surface of the mask is substantially planar, though potentially discontinuous, wherein the mating surface of the substrate or the mating surface of the first material is substantially planar, and wherein a normal to the plane of the mating surface of the mask is not parallel to a normal to the plane of the mating surface of the substrate or to the mating surface of the first material by an amount greater than that which is derived from an alignment tolerance.

Claim 9 (currently amended): The process of claim 1 wherein the formation of each of at least the plurality of adhered layers ~~structure~~ additionally comprises at least one planarization operation.

Claim 10 (previously presented): The process of claim 1 wherein the formation of each of at least the plurality of adhered layers comprises deposition of at least a second material.

Claim 11 (original): The process of claim 1 wherein a shape of the mating surface of the substrate or of the first material remains substantially constant during a course of mating and a shape of the mating surface of the mask changes during the

course of mating such that upon completion of mating, the shapes of the mating surface of the mask, and of the mating surface of the substrate or the mating surface of the first material are substantially the same in at least those areas intended for mating.

Claim 12 (previously presented): The process of claim 1 wherein a shape of the mating surface of the mask remains substantially constant during a course of mating and a shape of the mating surface of the substrate changes during the course of mating such that upon completion of mating, the shapes of the mating surface of the mask, and of the mating surface of the substrate are substantially the same in at least those areas intended for mating.

Claim 13 (previously presented): The process of claim 1 wherein a shape of the mating surface of the mask and a shape of the mating surface of the substrate changes significantly during the course of mating such that upon completion of mating, the shapes of the mating surface of the mask, and of the mating surface of the substrate are substantially the same in at least those areas intended for mating.

Claim 14 (currently amended): A process for forming a multilayer three-dimensional structure, comprising:

(a) forming and adhering a layer of material to a substrate, wherein the substrate may include one or more previously formed layers;

(b) repeating the forming and adhering operation of (a) a plurality of times to build up a three-dimensional structure from a plurality of adhered layers;

wherein the formation of each of at least a plurality of layers, comprises:

(1) obtaining a selective pattern of deposition of a first material having at least one void, comprising at least one of:

(a) selectively electrodepositing a first material onto the substrate such that at least one void remains, comprising:

(i) bringing a mating surface of a contact mask and a mating surface of the substrate together in a non-parallel manner in the presence of an electrolyte, ~~wherein at~~ so that on

initial contact~~,~~ the mating surface of the mask has a first curvature and a mating surface of the substrate has a second curvature, wherein the first curvature has a nominal radius that is less than that of the second curvature, and wherein after initial contact a separation of other portions of the mask and the substrate is further reduced so that additional mating occurs and such that one or both of the first and second curvatures change so that that first and second curvatures become more alike and so that mating leaves paths for excess electrolyte to escape from between the mask and the substrate;

(ii) electrodepositing the first material onto the substrate with the contact mask in place;

(iii) separating the contact mask and the substrate to expose the at least one void; or

(b) electrodepositing a first material onto the substrate and selectively etching the deposit of the first material to form at least one void therein, comprising:

(i) bringing a mating surface of a contact mask and a mating surface of the first material together in a non-parallel manner in the presence of an electrolyte~~, wherein at~~ so that on initial contact~~,~~ the mating surface of the mask has a first curvature and a mating surface of the first material has a second curvature, wherein the first curvature has a nominal radius that is less than that of the second curvature, and wherein after initial contact a separation of other surfaces of the mask and the substrate is further reduced so that additional mating occurs and such that one or both of the first and second curvatures change so that that first and second curvatures become more alike and so that mating leaves paths for excess electrolyte to escape from between the mask and the first material;

(ii) etching into the first material with the contact mask in place to form at least one void; and

(iii) separating the contact mask and the first material.

Claim 15 (original): The process of claim 14 wherein the second curvature retains a relatively constant value during mating and the first curvature changes to become more like the second curvature.

Claim 16 (original): The process of claim 14 wherein the first curvature retains a relatively constant value during mating and the second curvature changes to become more like the first curvature.

Claim 17 (currently amended): A process for forming a multilayer three-dimensional structure, comprising:

(a) forming and adhering a layer of material to a substrate, wherein the substrate may include one or more previously formed layers;

(b) repeating the forming and adhering operation of (a) a plurality of times to build up a three-dimensional structure from a plurality of adhered layers;

wherein the formation of each of at least a plurality of layers, comprises:

(1) obtaining a selective pattern of deposition of a first material having at least one void, comprising at least one of:

(a) selectively electrodepositing a first material onto the substrate such that at least one void remains, comprising:

(i) bringing a mating surface of a contact mask and a mating surface of the substrate together in a non-parallel manner in the presence of an electrolyte, ~~wherein at~~ so that on initial contact, the mating surface of the mask is more convex relative to the mating surface of the substrate, and wherein after further relative movement between the mask and the substrate

mating is completed and so that mating leaves paths for excess electrolyte to escape from between the mask and the substrate;

(ii) electrodepositing the first material onto the substrate with the contact mask in place;

(iii) separating the contact mask and the substrate to expose the at least one void; or

(b) electrodepositing a first material onto the substrate and selectively etching the deposit of the first material to form at least one void therein, comprising:

(i) bringing a mating surface of a contact mask and a mating surface of the first material together in a non-parallel manner in the presence of an electrolyte, wherein at so that on initial contact, the mating surface of the mask is more convex relative to the mating surface of the substrate, and wherein after further relative movement between the mask and the substrate mating is completed and so that mating leaves paths for excess electrolyte to escape from between the mask and the substrate.

(ii) etching into the first material with the contact mask in place to form at least one void; and

(iii) separating the contact mask and the first material.

Claim 18 (previously presented): The process of claim 17 wherein at initial contact the mating surface of the mask is convex while the mating surface of the substrate is (1) concave toward the mask with a larger radius of curvature, (2) planar, or (3) convex away from the mask.

Claim 19 (previously presented): The process of claim 17 wherein at initial contact the mating surface of the mask is planar while the mating surface of the substrate is convex away from the mask.

Claim 20 (previously presented): The process of claim 17 wherein at initial contact the mating surface of the mask is concave while the mating surface of the substrate is convex away from the mask with a smaller radius of curvature.

Claim 21 (previously presented): The process of claim 1 wherein at initial contact between the mating surface of the substrate the mating surface of the mask has a first curvature and the mating surface of the substrate has a second curvature, wherein the first curvature has a nominal radius that is less than that of the second curvature, and wherein after initial contact a separation of the mask and the substrate is further reduced so that additional mating occurs and such that one or both of the first and second curvatures change so that that first and second curvatures become more alike.

Claim 22 (previously presented): The process of claim 1 wherein at initial contact between the mating surface of the substrate and the mating surface of the contact mask, the mating surface of the mask is more convex relative to the mating surface of the substrate, and wherein after further relative movement between the mask and the substrate mating is completed.

Claim 23 (previously presented): The process of claim 14 wherein at initial contact between the mating surface of the substrate and the mating surface of the contact mask, the mating surface of the mask is more convex relative to the mating surface of the substrate, and wherein after further relative movement between the mask and the substrate mating is completed.